



4-5 B mean ENERGY!

ENERGY is what powers us. Energy also powers our world. Without it, we would die. – *Felicity*

FOOD ENERGY is very important in everybody's life. Food gives us energy and we need energy to live. Different foods provide different amounts of energy. To find the amount of energy in a food you can look on the food package. You will find it under **NUTRITIONAL INFORMATION** next to **Energy**. Energy is measured in calories, kilocalories, joules and kilojoules. One kilocalorie is 1000 calories and one kilojoule is 1000 joules. Food energy gives energy to people and animals so that we can do everything we would normally do. If you eat a lot of food energy you have more energy to do sport and other things. If we had no energy, we would not be able to wake-up, eat, walk, talk and move. Without food energy (or any other type of energy) we would not be able to live. Sometimes we take food and its energy for granted, but we shouldn't.

– *Catherine and Brittany*

KINETIC ENERGY is the energy of motion. Any object which moves has kinetic energy. When it is still it has potential energy.

– *Forozan*

WATER ENERGY is in the rivers and oceans which are always moving. Moving energy is called kinetic energy. The energy we get from rivers and tides will always be there. There will always be water for us to use. Hydroelectric power schemes use falling water from rivers or reservoirs to make electricity.

– *Amy and Leeing*

FOSSIL FUELS are OIL, COAL and GAS. Petrol is made from oil. In prehistoric times, the sun's energy passed through plants to form fossil fuels. They have been used in the past 500 years to help provide for people's energy needs. Today we use them for making the machinery work in factories, for transport, for making electricity, for providing heat and for cooking food.

– *Stuti and Helen*

SOUND ENERGY is made when the air vibrates. It can also go long distances. We made some models that showed how this happens for our presentation.

– *Charlotte and Isabell*



LIGHT ENERGY is radiant energy. Light energy travels in the air in rays. There are many sources of light energy, they are: sun light, electricity and fire. It can even come from fireflies. Light energy is capable of being transformed and used. You can use light energy in both day and night. Light energy can be converted to other forms of energy. Sunlight goes down on solar panels to convert to energy for the household. Some people say that they would never survive with out light energy.

– *Amanda and Sonia*

MAGNETIC ENERGY

People have known about magnets and magnetism for thousands of years. This is because some magnets occur naturally. In certain places, you can pick them up from the ground. Most of the time, these natural magnets come in the form of lumps of stone called lodestone or magnetite, a type of rock that contains lots of iron. Ancient people noticed that two lumps of this rock could stick together. Then sailors and explorers discovered how to use thin slivers of this rock as magnetic compasses to find their way. However, people have only understood more about magnets in the last 200 years. These are some things we found out about magnets:

- You cannot tell if something is a magnet by looking at its shape, size or colour. You need to test it with objects that contain iron.
- Ordinary types of magnets are called permanent magnets. They are magnetic all the time and they keep their magnetism for months and years. There are other kinds of magnets, such as electromagnets, whose strength and magnetism can be varied.
- Every magnet has two poles or ends no matter what shape it is

Most metals are not magnetic. The most common magnetic metals are cobalt, nickel and iron.

– *by Jack and Neil*

SOLAR POWER is an efficient way to heat or cool your home. It causes a lot less pollution but it will not work on cloudy rainy days. Places like Africa get a lot of sunshine but Europe and the top of North America only get about four hours of sunshine a day in winter. Sun energy can be used to power a car. It is mainly used to light houses, power televisions and cool or heat houses.

– *Andrew, Prabdip and Keshav*

ELECTRICAL ENERGY figures everywhere in our lives. Electricity lights up our homes, cooks our food, powers our computers, television sets, and other electronic devices. Electricity from batteries keeps our cars running and makes our flashlights shine in the dark.

– *Kilian and Huy*